

Long Beach Press Telegram

Drinking water fit for a king

Seawater desalination plant may help Tongan islands.

By Neda Raouf
Staff writer

LONG BEACH All eyes were on the King of Tonga as he lifted a paper cup to his mouth to taste the drinking water that had been filtered down from salty ocean water using the city's patented desalination technology.

One sip, and the result was a wide smile and several nods from King Taufa'ahau Tupou IV, 85, who came here to get a demonstration of the seawater desalination facility as a possible solution to water supply rehabilitation problems that the island nation may face in the future.

"I think it's pretty exciting," Tupou, who has ruled the island nation since 1965, said later. "I think it'll have many (interesting) applications."

Tonga - comprised of 171 islands spread over 434,000 square miles in the South Pacific - relies on groundwater but may need to supplement that in the future, he said.

About 105,000 Tongans live on 45 islands, and about two-thirds of them live on the island of Tongatapu.

Surrounded by secret service agents, several members of his senior staff and many Long Beach officials, Tupou arrived at the city's Groundwater Treatment Plant at 2950 Redondo Ave. at 10:30 a.m., when he heard a 45-minute presentation about the new technology and future plans for its use in the city.

His visit happened nearly six months after his daughter Princess Salote Mafile'o Pilolevu Tuita came here to learn about the patented membrane technology to filter salt and impurities from ocean water.

Sitting in a wheelchair, the king listened quietly to the Water Department presentation in front of the pilot plant that has been operating for two years.

"We're very pleased with the operation and now (are) working to get this invention into the real world," said Kevin Wattier, the Water Department's general manager.

For the past two years, Water Department engineers including the technology's inventor, Diem Vuong have experimented with a prototype at the city's water treatment plant capable of producing 9,000 gallons of drinking water per day enough to supply 500 people.

A 300,000-gallon-per-day seawater desalination facility under construction since November is scheduled to be completed by the end of the year.

Officials also have plans for a larger, third facility to be built by 2010 to meet the water needs of 10 percent to 15 percent of the population or about 60,000 people, Wattier said.

Vuong, the assistant general manager of the Long Beach Water Department, turned on the machine for several minutes to show how it works before handing the king the water in the paper cup.

Brian Zetlen, an adviser to the royal family, said the king was intensely interested in the technology, and that the Tongan kingdom will follow it to see how it can be used, he said.

Stephen Conley, secretary of the water commission, said that the city is not making it available yet.